WEST Search History

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DATE: Monday, October 30, 2006

Hide?	Set Name	Query	Hit Count
		DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR	
☐	L1	$ribitol	1858
☐	L2	L1 and aureus	192
☐	L3	L2 and (antibodies or antibody or igg or igm or ig or iga or siga or moab or mab or antisera or antiserum or polyclonal or poly-clonal or monoclonal or immunotherapy or immunotherapeutic or passively or passive or immunopassive or ivig or igiv or ivigg or iggiv)	163
☐	L4	L2 and (antibodies or antibody or igg or igm or ig or iga or siga or moab or mab or antisera or antiserum or polyclonal or poly-clonal or monoclonal or immunotherapy or immunotherapeutic or passively or passive or immunopassive or ivig or igiv or ivigg or iggiv).ti,ab,clm.	94
☐	L5	l1.clm.	218
☐	L6	ribitol$.ti,ab,clm.	375
☐	L7	L6 or l5	388
☐	L8	L7 and l4	8
☐	L9	antipolyribosylribitol or anti-polyribosylribitol or (antibodies near polyribosylribitol) or anti-prp or antiprp or antiribitol or anti-ribitol	274
☐	L10	L9 and aureus	40
☐	L11	L9 same aureus	0
☐	L12	wta.clm. or antiwta.clm.	35
☐	L13	anti-wta.clm.	0
☐	L14	L12 or anti-wta	35
☐	L15	L14 and l1	1
☐	L16	L14 and l6	0
☐	L17	wall near teichoic near acid	58
☐	L18	L17 same (staphy$ or aureus!)	19

END OF SEARCH HISTORY

. 20060228368. 07 Apr 05. 12 Oct 06. Method of protecting against staphylococcal infection. Fattom; Ali, et al. 424/164.1; 424/243.1 A61K39/085 20060101 A61K39/40 20060101

☐ 2. 20050158346. 18 Jan 05. 21 Jul 05. Antimultiorganism Glycoconjugate vaccine. Kubler-Kielb, Joanna, et al. 424/246.1; 530/395 536/54 A61K039/00 A61K039/38 C07K014/32.

☐ 3. 6218166. 05 Jun 95; 17 Apr 01. Adjuvant incorporation into antigen carrying cells: compositions and methods. Ravindranath; Mepur H., et al. 435/366; 424/150.1 424/174.1 424/179.1 424/184.1 424/201.1 424/240.1 424/277.1 424/278.1 424/283.1 424/78.31 435/325 435/354 435/372. A61K039/00 A61K045/00 A61K039/40 A61K039/395 .

☐ 4. 5955079. 06 Jun 95; 21 Sep 99. Dual carrier immunogenic construct. Mond; James J., et al. 424/193.1; 424/197.11 424/201.1 424/203.1 424/244.1 424/280.1 530/403 530/412 530/806 536/123.1. A61K039/385 .

☐ 5. 5585100. 13 Mar 95; 17 Dec 96. Dual carrier immunogenic construct. Mond; James J., et al. 424/193.1; 424/196.11 424/197.11 424/201.1 424/202.1 424/203.1 424/236.1 424/239.1 424/240.1 424/244.1 424/256.1 424/280.1 530/403 530/806. A61K039/385 A61K039/02 A61K039/12 A61K039/116 .

☐ 6. 4220717. 22 Dec 77; 02 Sep 80. Isolation and purification of polyribosyl ribitol phosphate from Haemophilus influenzae type b.. Kuo; Joseph S.. 435/101; 424/203.1 424/256.1 424/831 435/803 435/851 536/123 536/123.1 536/127. C12D013/04 .

☐ 7. 4196192. 28 Oct 77; 01 Apr 80. Combined Haemophilus influenzae type b and pertussis vaccine. Kuo; Joseph S. C.. 424/203.1; 424/254.1 424/256.1 424/831. A61K039/02 .

☐ 8. US20050158346A. New glycoconjugate preparation comprises polysaccharides derived from cell wall polysaccharide preparation from Bacillus pumilus Sh 18, useful as immunogenic composition or as vaccine for eliciting an immune response in a subject. KUBLER-KIELB, J, et al. A61K039/00 A61K039/38 C07K014/32.

Fulltext Word Count: 15844

7/3/174 (Item 2 from file: 654)
DIALOG(R)File 654:US Pat.Full.

6239694
Derwent Accession: 1999-095329
UTILITY
Opsonic and protective monoclonal **and chimeric** antibodies **specific for** lipoteichoic **acid of gram positive bacteria**
Inventor: Fischer, Gerald W., Bethesda, MD, US
Schuman, Richard F., Gaithersburg, MD, US
Wong, Hing, Weston, FL, US
Stinson, Jeffrey R., Davie, FL, US
Assignee: Henry M. Jackson Foundation for the Advancement of Military Medicine, (02), Rockville, MD, US
Sunol Molecular Corporation, (02), Miramar, FL, US
Examiner: Smith, L. J.
Assistant Examiner: Porter, Ginny Allen
Legal Representative: Winston & Strawn LLP

	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 6939543	B2	20050906	US 2001893615	20010629
Related Publ	US 20020082395	A1	20020627		
Division	US 6610293	A		US 9897055	19980615
Provisional				US 60-49871	19970616

Fulltext Word Count: 15450

7/3/176 (Item 4 from file: 654)
DIALOG(R)File 654:US Pat.Full.

0005905519
Derwent Accession: 2004-461115
Wall teichoic acid as a target for anti-staphylococcal therapies and vaccines
Inventor: Kokai-Kun, John, INV
Peschel, Andreas, INV
Weidenmaier, Christopher, INV
Kristian, Sascha, INV
Correspondence Address: FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P., 1300 I Street, N.W., Washington, DC, 20005-3315, US

	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 20040247605	A1	20041209	US 2003724194	20031201
Provisional				US 60-430225	20021202

Fulltext Word Count: 23613

7/3/178 (Item 6 from file: 654)
DIALOG(R)File 654:US Pat.Full.

0005576889 **IMAGE Available
Derwent Accession: 2003-646000
Opsonic monoclonal **and chimeric** antibodies **specific for** lipoteichoic **acid of Gram positive bacteria**
Inventor: Stinson, Jeffrey, INV
Schuman, Richard, INV
Mond, James, INV
Lees, Andrew, INV
Fischer, Gerald, INV
Correspondence Address: Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P., 1300 I Street, N.W., Washington, DC, 20005-3315, US

	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 20040052779	A1	20040318	US 2002323926	20021220
Provisional				US 60-343503	20011221

Fulltext Word Count: 24045

7/3/179 (Item 7 from file: 654)
DIALOG(R)File 654:US Pat.Full.

0005508756 **IMAGE Available
Derwent Accession: 1999-095329
Opsonic and protective monoclonal and chimeric antibodies specific for lipoteichoic acid of gram posiive bacteria
Inventor: Fischer, Gerald, INV
Schuman, Richard, INV
Wong, Hing, INV
Stinson, Jeffrey, INV
Assignee: The Henry M. Jackson Foundation for the Advancement of Military Medicine(02)
Sunol Molecular Corporation(02)
Correspondence Address: FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP, 1300 I STREET, NW, WASHINGTON, DC, 20005, US

	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 20040013673	A1	20040122	US 2003601171	20030623
Continuation	US 6610293			US 9897055	19980615
Provisional				US 60-49871	19970616

Fulltext Word Count: 17578

7/3/180 (Item 8 from file: 654)
DIALOG(R)File 654:US Pat.Full.

0005479097 **IMAGE Available
Derwent Accession: 2003-646000
Opsonic monoclonal **and chimeric** antibodies **specific for** lipoteichoic

WEST Search History

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DATE: Monday, October 30, 2006

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☐	L1	(RIBITOLPHOSPHATE | RIBITOLPHOSPHATEPOLYSACCHARIDE | RIBITOLPHOSPHORIC | RIBITOL-PHOSPHATE | RIBITOL-POSITIVE | RIBITOL-TEICHOIC)!	17
		DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR	
☐	L2	antiribitol or anti-ribitol	0
☐	L3	antiribitol$ or anti-ribitol$	0
☐	L4	antiwta or anti-wta	1
☐	L5	anti-teichoic or antiteichoic or anti-ribitol-teichoic or anti-ribitolteichoic	11

END OF SEARCH HISTORY

WEST Search History

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DATE: Monday, October 30, 2006

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☐	L1	fischer.in. and $ribitol$	15
		DB=DWPI; PLUR=YES; OP=OR	
☐	L2	stinson.in. and lipoteichoic	2
		DB=PGPB; PLUR=YES; OP=OR	
☐	L3	stinson.in. and lipoteichoic	8
☐	L4	l3 and (wta or $ribitol$)	3
		DB=DWPI; PLUR=YES; OP=OR	
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☐	L6	2003059260	3
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☐	L7	(US-20030235578-A1)![pn]	0
☐	L8	(WO-2003059260-A2| US-20030235578-A1| AU-2002359794-A1| US-20040052779-A1| EP-1463479-A2| JP-2005514053-W)![pn]	0
		DB=PGPB; PLUR=YES; OP=OR	
☐	L9	drabick.in. and lipoteichoic	2
☐	L10	L9 and $ribitol$	0
☐	L11	L9 and ribitol	0
☐	L12	L9 and aureus	2

END OF SEARCH HISTORY

WEST Search History

Hide Items | Restore | Clear | Cancel

DATE: Monday, October 30, 2006

Hide?	Set Name	Query	Hit Count
		DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR	
☐	L1	$ribitol	1858
☐	L2	L1 and aureus	192
☐	L3	L2 and (antibodies or antibody or igg or igm or ig or iga or siga or moab or mab or antisera or antiserum or polyclonal or poly-clonal or monoclonal or immunotherapy or immunotherapeutic or passively or passive or immunopassive or ivig or igiv or ivigg or iggiv)	163
☐	L4	L2 and (antibodies or antibody or igg or igm or ig or iga or siga or moab or mab or antisera or antiserum or polyclonal or poly-clonal or monoclonal or immunotherapy or immunotherapeutic or passively or passive or immunopassive or ivig or igiv or ivigg or iggiv).ti,ab,clm.	94
☐	L5	l1.clm.	218
☐	L6	ribitol$.ti,ab,clm.	375
☐	L7	L6 or l5	388
☐	L8	L7 and l4	8
☐	L9	antipolyribosylribitol or anti-polyribosylribitol or (antibodies near polyribosylribitol) or anti-prp or antiprp or antiribitol or anti-ribitol	274
☐	L10	L9 and aureus	40
☐	L11	L9 same aureus	0
☐	L12	wta.clm. or antiwta.clm.	35
☐	L13	anti-wta.clm.	0
☐	L14	L12 or anti-wta	35
☐	L15	L14 and l1	1
☐	L16	L14 and l6	0
☐	L17	wall near teichoic near acid	58
☐	L18	L17 same (staphy$ or aureus!)	19
☐	L19	antiteichoic or anti-teichoic	11

END OF SEARCH HISTORY

DOCUMENT-IDENTIFIER: US 6428971 B1
TITLE: Teichoic acid enzymes and assays

Detailed Description Text (19):
Despite the nucleic acid problem, TAP was purified four-fold from the membrane preparation. The enzyme was stable for two weeks when stored in ice. Though TAP synthesizes cell wall teichoic acid in situ, lipoteichoic acid from either B. subtilis, S. aureus, or E. faecalis could serve as an acceptor of CDP [.sup.3 H]glycerol. The availability of a commercial source of lipoteichoic acid will allow the development of the TAP assay for a high volume screen which could lead to the discovery of TAP inhibitors. It appears that TAP recognizes the polyglycerol-phosphate backbone of either cell wall teichoic acid or lipoteichoic acid and largely ignores the proximal portion of either polymer.

Detailed Description Text (20):
The biosynthetic pathway for teichoic acid has been established for many years, yet the exact function of this anionic polymer has never been determined. One report describes the use of teichoic acid as a reserve phosphate source in which gram positive bacteria draw upon the glycerolphosphate when phosphate levels in the environment are low (Grant W D. "Cell wall teichoic acid as a reserve phosphate source in Bacillus subtilis" J Bacteriol (1979) vol. 137, pp. 35-43, incorporated by reference). While this role for teichoic acid cannot be disputed, the fact that B. subtilis cannot survive in the absence of teichoic acid synthesis under conditions of high phosphate levels (Mauel C, Young M, Margot P, Karamata D. "The essential nature of teichoic acids in Bacillus subtilis as revealed by insertional mutagenesis" Mol Gen Genet (1991) vol. 215, pp. 388-394, incorporated by reference) indicate that a more essential role is likely. Some reports point to the ability of teichoic acid to chelate divalent cations (Fischer, W. "Lipoteichoic acid and lipids in the membrane of Staphylococcus aureus" Med. Microbiol. Immunol. (1994) vol.183, pp. 61-76, incorporated by reference), but lipoteichoic acid would presumably chelate in the absence of cell wall teichoic acid. It is far more likely that the essential nature of teichoic acid is in maintaining the structural integrity of the cell wall, due to the covalent attachment to peptidoglycan (FIG. 8). Given the information disclosed herein it would be obvious to one skilled in the art to randomly mutate the cloned rodC gene, integrate the mutated gene back into the chromosome, and produce a pool of TAP mutants which can be used to study the effects of teichoic acid on gram positive cell wall integrity.

Detailed Description Text (26):
TAP catalyzes the synthesis of the polyglycerolphosphate backbone of cell wall teichoic acid in B. subtilis, and this polymer is covalently attached to peptidoglycan (FIG. 8). Lipoteichoic acid is a structurally related polymer that is anchored to the cell membrane of gram positive bacteria by the fatty acyl side chains of a phospholipid moiety (FIG. 9). Both lipoteichoic acid and cell wall teichoic acid share the same polyglycerolphosphate backbone but there is evidence that TAP does not synthesize lipoteichoic acid in situ (Fischer, W. "Lipoteichoic acid and lipids in the membrane of Staphylococcus aureus" Med. Microbiol. Immunol. (1994) vol. 183, pp. 61-76). Herein, we present data that shows that lipoteichoic acid can serve as an alternate substrate for TAP. This is an important discovery, both because lipoteichoic acid is available commercially and cell wall teichoic acid is not, and because tests have suggested that soluble teichoic acid does not serve as a suitable substrate for TAP. This discovery now makes it possible to develop mechanistic screens for TAP inhibitors.

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Please see HELP NEWS159.
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IPCR/8 classification codes now searchable as IC=. See HELP NEWSIPCR.
  File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 2006 The Thomson Corp
  File 444:New England Journal of Med. 1985-2006/Oct W3
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  File 467:ExtraMED(tm) 2000/Dec
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DIALOG(R)File 73:EMBASE

07368255 EMBASE No: 1998247739
Association between high antistaphylolysin and teichoic acid antibody **titres with rheumatic syndromes**
Valtonen J.M.O.; Syrjala M.T.; Valtonen V.V.
Dr. V.V. Valtonen, Department of Medicine, Helsinki University Central Hospital, 00290 Helsinki Finland
Clinical Rheumatology (CLIN. RHEUMATOL.) (Belgium) 1997, 16/6 (557-561)
CODEN: CLRHD ISSN: 0770-3198
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 42

To analyse which rheumatic syndromes are associated with serological evidence of recent Staphylococcus **aureus** infection, we studied retrospectively 44 adult patients, gathered between 1979-1990, having an acute arthritis syndrome or an exacerbation in their chronic rheumatic disease and simultaneously a high antistaphylolysin (ASTA > 4,0) and/or high teichoic acid **antibody** titre (TAA > 8). Patients with septic arthritis or endoprosthetic infections were not included. 25 patients had arthritis/arthralgia associated with a known rheumatic disease, 9 patients had reactive arthritis and 8 patients had arthralgia. The frequency of HLA-B27 in tested patients was significantly higher in the whole patient group than in the healthy Finnish population (43% v 14%, $p < 0.001$). It is concluded that high ASTA and/or TAA titres are associated with various acute rheumatic syndromes including reactive arthritis.

DRUG DESCRIPTORS:
* **teichoic acid** --endogenous compound--ec; *bacterium **antibody** --endogenous compound--ec
HLA B27 antigen--endogenous compound--ec
MEDICAL DESCRIPTORS:
*rheumatic disease--diagnosis--di; * **antibody** titer; *staphylococcus **aureus** ; *staphylococcus infection--diagnosis--di; *staphylococcus infection--etiology--et
disease association; rheumatoid arthritis--diagnosis--di; reactive arthritis--diagnosis--di; arthralgia--diagnosis--di; gene frequency; HLA typing; finland; human; male; female; clinical article; controlled study; adolescent; aged; adult; article; priority journal
CAS REGISTRY NO.: **9041-38-7** (**teichoic acid**)
SECTION HEADINGS:
004 Microbiology: Bacteriology, Mycology, Parasitology and Virology
026 Immunology, Serology and Transplantation
031 Arthritis and Rheumatism

14/9/16 (Item 16 from file: 73)
DIALOG(R)File 73:EMBASE

05080991 EMBASE No: 1992221207
Detection of teichoic acid antibodies **in Staphylococcus** aureus **infections**
Wise K.A.; Tosolini F.A.
Microbiology Department, Wollongong Hospital, Crown Street,Wollongong, N. S. W. 2500 Australia
Pathology (PATHOLOGY) (Australia) 1992, 24/2 (102-108)

CODEN: PTLGA ISSN: 0031-3205
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

A commercially available agar gel diffusion (AGD) assay was used to investigate the teichoic acid **antibody** (TAA) response in 183 patients with proven Staphylococcus **aureus** (SA) infections. Two control groups were also investigated. One consisted of 100 hospitalized patients with a variety of medical and surgical conditions other than SA infection and the other consisted of 116 healthy hospital staff members. The sensitivity of the AGD assay varied markedly depending on the site of infection in the patients with proven SA infections. All patients with SA endocarditis developed positive TAA titres (>= 1.4), although more than one third of these were initially negative. In patients with chronic osteomyelitis or septic arthritis, 41% had positive TAA titres, whereas no positive titres were detected in patients with acute osteomyelitis or septic arthritis. Lower rates of positive TAA titres were found in patients with deep abscesses (27%), pneumonia (14%) and post-operative infections (9%), but no positive titres occurred in patients with acute uncomplicated bacteremia, cellulitis or meningitis. In 100 hospitalized control patients, no positive titres were detected, and only >= 1.4 of 116 (0.9%) healthy hospital staff controls was positive. Suggested guidelines for the use of the AGD assay are discussed.

DRUG DESCRIPTORS:
* **antibody** --endogenous compound--ec; * **teichoic acid** --endogenous compound --ec
MEDICAL DESCRIPTORS:
*staphylococcus infection--etiology--et
abscess; article; bacteremia; bacterial arthritis--etiology--et; chronic osteomyelitis--etiology--et; controlled study; diagnostic accuracy; endocarditis--etiology--et; human; major clinical study; pneumonia --etiology--et; postoperative infection; priority journal; staphylococcus **aureus**
CAS REGISTRY NO.: **9041-38-7** (**teichoic acid**)
SECTION HEADINGS:
004 Microbiology: Bacteriology, Mycology, Parasitology and Virology

14/9/18 (Item 18 from file: 73)
DIALOG(R)File 73:EMBASE

04908654 EMBASE No: 1992048869
Effects of Staphylococcus aureus **cell wall products (teichoic acid, peptidoglycan) and enterotoxin B on** immunoglobulin **(IgE, IgA,** IgG **) synthesis and CD23 expression in patients with atopic dermatitis**
Neuber K.; Konig W.
Inst. Med. Mikrobiol./Immunol., Arbeitsgr. Infektabwehr-mech., Ruhr-Universitat Bochum, Universitatsstrasse 150,4630 Bochum Germany
Immunology (IMMUNOLOGY) (United Kingdom) 1992, 75/1 (23-28)
CODEN: IMMUA ISSN: 0019-2805
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

The influence of staphylococcal cell wall products (teichoic acid, peptidoglycan) and enterotoxin B on peripheral blood lymphocytes (PBL) from patients with atopic dermatitis (AD) was investigated. The parameters studied were spontaneous and interleukin-inducible **immunoglobulin** (IgA, IgE, **IgG**) synthesis and CD23 expression. PBL from non-atopic donors

served as controls. Teichoic acid and peptidoglycan induced an enhanced synthesis of IgA and **IgG** in normal donors. However, IgA and **IgG** synthesis in PBL from patients with AD was significantly suppressed by teichoic acid and enterotoxin B. The incubation of PBL from normal donors with enterotoxin B and interleukin-4 (IL-4) or IL-5 led to a significant suppression of IgA and **IgG** synthesis. Co-stimulation of PBL with teichoic acid or peptidoglycan and Il-4 led to a pronounced increase in IgE synthesis and CD23 expression in patients with AD. Our data indicate that cell wall products and toxins of staphylocci modulate the cytokine-dependent humoral immunity in patients with AD and may be responsible for allergic skin reactions in AD.

DRUG DESCRIPTORS:
*cytokine--endogenous compound--ec; *peptidoglycan--endogenous compound--ec ; * **teichoic acid** --endogenous compound--ec
cd23 antigen--endogenous compound--ec; unclassified drug
MEDICAL DESCRIPTORS:
* **immunoglobulin** production
adult; article; atopic dermatitis; clinical article; controlled study; human; human cell; priority journal
DRUG TERMS (UNCONTROLLED): enterotoxin b--endogenous compound--ec
CAS REGISTRY NO.: 9047-10-3 (peptidoglycan); **9041-38-7** (**teichoic acid**)
SECTION HEADINGS:
004 Microbiology: Bacteriology, Mycology, Parasitology and Virology
013 Dermatology and Venereology
026 Immunology, Serology and Transplantation

14/9/23 (Item 23 from file: 73)
DIALOG(R)File 73:EMBASE

04472602 EMBASE No: 1990360711
Preparation of a latex reagent for the detection of anti-staphylococcus aureus **ribitol teichoic acid** antibodies
De Montclos M.; Flandrois J.-P.
Bacteriology Laboratory, Universite Claude Bernard Lyon I, Faculte de Medecine Lyon-Sud, F-69310 Pierre-Benite France
Zentralblatt fur Bakteriologie (ZENTRALBL. BAKTERIOL.) (Germany) 1990 , 274/1 (50-60)
CODEN: ZEBAE ISSN: 0934-8840
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: GERMAN
DRUG DESCRIPTORS:
* **teichoic acid**
latex
MEDICAL DESCRIPTORS:
* **antibody** detection; *staphylococcus **aureus** **antibody** titer; antigen binding; antigen purification; chemical analysis; counter immunoelectrophoresis; immunogenicity; latex agglutination test; human; article
CAS REGISTRY NO.: **9041-38-7** (**teichoic acid**)
SECTION HEADINGS:
004 Microbiology: Bacteriology, Mycology, Parasitology and Virology

14/9/28 (Item 28 from file: 73)
DIALOG(R)File 73:EMBASE

An enzyme-linked immunosorbent assay was used to evaluate the **immunoglobulin** G (**IgG**) response to Staphylococcus **aureus** crude teichoic acid (TA) and peptidoglycan (PG) in both rabbits and patients with osteomyelitis. In rabbits with experimental S. **aureus** osteomyelitis, elevated levels of **IgG** to TA were present in 13/18 (72%) of the serum samples obtained at 4 and 10 weeks postinfection. In contrast, only 5/18 (28%) of these sera were found to be positive for **antibodies** to PG. Of a total of 39 patients with confirmed S. **aureus** osteomyelitis (11 acute, 28 chronic), **IgG** to TA was elevated in 17 (44%), whereas **antibodies** to PG were found to be increased in only 1 (3%). Cross-reacting **antibodies** to S. **aureus** TA were detected in only 1/18 (6%) of the patients with osteomyelitis caused by organisms other than S. **aureus** . These studies indicate that **IgG** to TA is more prevalent than **IgG** to PG in patients with staphylococcal osteomyelitis. Although these results are encouraging, a large number of patients is required for an adequate evaluation of the TA enzyme-linked immunosorbent assay for the diaganosis and management of suspected S. **aureus** osteomyelitis.

DRUG DESCRIPTORS:
* **immunoglobulin** g; *peptidoglycan; * **teichoic acid**
MEDICAL DESCRIPTORS:
* **antibody** response; *osteomyelitis; *staphylococcus **aureus**
enzyme linked immunosorbent assay; human; rabbit; serum; bone; priority journal; animal experiment; animal cell
CAS REGISTRY NO.: 97794-27-9 (**immunoglobulin** g); 9047-10-3 (peptidoglycan); **9041-38-7** (**teichoic acid**)
SECTION HEADINGS:
004 Microbiology: Bacteriology, Mycology, Parasitology and Virology
033 Orthopedic Surgery
026 Immunology, Serology and Transplantation

14/9/30 (Item 30 from file: 73)
DIALOG(R)File 73:EMBASE

03419227 EMBASE No: 1987171804
Structure of the Staphylococcus aureus **cell wall determined by the freeze-substitution method**
Umeda A.; Ueki Y.; Amako K.
Department of Bacteriology, Faculty of Medicine, Kyushu University, Fukuoka 812 Japan
Journal of Bacteriology (J. BACTERIOL.) (United States) 1987, 169/6 (2482-2487)
CODEN: JOBAA
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH

The fine structure of the Staphylococcus **aureus** cell wall was determined by electron microscopy with the new technique of rapid freezing and substitution fixation. The surface of the cell wall was covered with a fuzzy coat which consisted of fine fibers or an electron-dense mass. Morphological examination of the cell wall, which was treated sequentially with sodium dodecyl sulfate, trypsin, and trichloroacetic acid revealed that this coat was partially removed by trypsin digestion and was completely removed by trichloroacetic acid extraction but was not affected by sodium dodecyl sulfate treatment, suggesting that the fuzzy coat consists mostly of a complex of teichoic acids and proteins. This was confirmed by the application of the concanavalin A-ferritin technique for teichoic acid and antiferritin **immunoglobulin** G technique for protein A.

DRUG DESCRIPTORS:
immunoglobulin ; protein; **teichoic acid**
MEDICAL DESCRIPTORS:
*cell wall; *staphylococcus **aureus**
priority journal; electron microscopy; nonhuman
CAS REGISTRY NO.: 9007-83-4 (**immunoglobulin**); 67254-75-5 (protein);
9041-38-7 (**teichoic acid**)
SECTION HEADINGS:
004 Microbiology: Bacteriology, Mycology, Parasitology and Virology

14/9/34 (Item 34 from file: 73)
DIALOG(R)File 73:EMBASE

03197591 EMBASE No: 1986130168
IgE and IgG antibodies **to Staphylococcus** aureus **solubilized cell wall proteins and teichoic acid in patients with the hyper- IgE syndrome**
Shibata R.; Umeda A.; Miyazaki S.; et al.
Department of Pediatrics, National Minami-Fukuoka Chest Hospital, Minami-ku, Fukuoka 815 Japan
Acta Paediatrica Japonica (Overseas Edition) (ACTA PAEDIATR. JPN. OVERS. ED.) (Japan) 1985, 27/4 (575-579)
CODEN: APDJB
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH
DRUG DESCRIPTORS:
* **immunoglobulin** e; * **immunoglobulin** g
bacterium **antibody** ; cell membrane protein; **teichoic acid**
MEDICAL DESCRIPTORS:
*hyperimmunoglobulinemia; *staphylococcus **aureus**
radioimmunoassay; human; child; diagnosis
CAS REGISTRY NO.: 37341-29-0 (**immunoglobulin** e); 97794-27-9 (**immunoglobulin** g); **9041-38-7** (**teichoic acid**)
SECTION HEADINGS:
007 Pediatrics and Pediatric Surgery
026 Immunology, Serology and Transplantation
004 Microbiology: Bacteriology, Mycology, Parasitology and Virology
025 Hematology

14/9/35 (Item 35 from file: 73)
DIALOG(R)File 73:EMBASE

03182566 EMBASE No: 1986115143
Antibodies **to staphylococcal teichoic acid and alpha toxin in patients with cystic fibrosis**
Ericsson A.; Granstrom M.; Mollby R.; Strandvik B.
Department of Pediatrics, Huddinge University Hospital, S-14186 Huddinge Sweden
Acta Paediatrica Scandinavica (ACTA PAEDIATR. SCAND.) (Sweden) 1986, 75/1 (139-144)
CODEN: APSVA
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH

Enzyme-linked immunosorbent assay (ELISA) was used for **IgG antibody** determination to teichoic acid and alpha-toxin from Staphylococcus **aureus**

in 65 patients with cystic fibrosis (CF). In patients chronically colonized with S. **aureus** , elevated titres to teichoic acid were found in 13/35 (37%) patients, to alpha-toxin in 12/35 (34%) and to either antigen in 18/35 (51%). Patients with elevated titres to teichoic acid had a significantly lower X-ray score than patients with normal titres. The highest titres against both teichoic acid and alpha-toxin were seen in patients not receiving optimal treatment. These findings suggest that staphylococci contribute to the tissue damage in CF and that the determination of **antibodies** expecially to staphylococcal teichoic acid might be of value in the diagnosis and management of staphylococcal infections in patients with CF.

DRUG DESCRIPTORS:
*alpha toxin; * **teichoic acid**
antibody
MEDICAL DESCRIPTORS:
*cystic fibrosis; *staphylococcus **aureus**
enzyme linked immunosorbent assay; priority journal; child; diagnosis; major clinical study; human; blood and hemopoietic system; lymphatic system ; respiratory system
CAS REGISTRY NO.: **9041-38-7** (**teichoic acid**)
SECTION HEADINGS:
007 Pediatrics and Pediatric Surgery
004 Microbiology: Bacteriology, Mycology, Parasitology and Virology
015 Chest Diseases, Thoracic Surgery and Tuberculosis
022 Human Genetics

14/9/55 (Item 55 from file: 73)
DIALOG(R)File 73:EMBASE

02126636 EMBASE No: 1982167733
Polyclonal **response of human lymphocytes to bacterial cell walls, peptidoglycans and teichoic acids**
Rasanen L.; Mustikkamaki U.P.; Arvilommi H.
Inst. Biomed. Sci., Univ. Tampere, SF-33101 Tampere 10 Finland
Immunology (IMMUNOLOGY) (United Kingdom) 1982, 46/3 (481-486)
CODEN: IMMUA
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH

It has been found earlier that many bacteria are **polyclonal** activators of human lymphocytes. This phenomenon was further analysed by preparing cell walls, peptidoglycans and teichoic acids from Staphylococcus **aureus** Wood 46 and Bacillus subtilis and studying their capacity to stimulate human adult and newborn lymphocytes to proliferate and to produce leucocyte inhibitory factor (LIF). All these bacterial surface components acted as **polyclonal** activators. In our opinion these findings further strengthen the view that in infections there are a variety of bacterial products capable of inducing a **polyclonal** response of the host.

DRUG DESCRIPTORS:
*bacterial antigen; *peptidoglycan; * **teichoic acid**
leukocyte migration inhibition factor
MEDICAL DESCRIPTORS:
* **antibody** production; *lymphocyte transformation
bacillus subtilis; **polyclonal** activation; staphylococcus **aureus** ; in vitro study; animal experiment; blood and hemopoietic system; normal human
CAS REGISTRY NO.: 9047-10-3 (peptidoglycan); **9041-38-7** (**teichoic acid**)

SECTION HEADINGS:
  026 Immunology, Serology and Transplantation
  004 Microbiology: Bacteriology, Mycology, Parasitology and Virology
? logoff hold

 9/9/5   **(Item 1 from file: 73)**
DIALOG(R)File 73:EMBASE

03100992   EMBASE No: 1986213569
  Relationship of staphylococcal tolerance, teichoic acid antibody, and serum bactericidal activity to therapeutic outcome in Staphylococcus aureus bacteremia
  Rahal Jr. J.J.; Chan Y.-K.; Johnson G.
  Department of Medicine, New York University School of Medicine, New York, NY United States
  American Journal of Medicine (AM. J. MED.) (United States) 1986, 81/1 (43-52)
  CODEN: AJMEA
  DOCUMENT TYPE: Journal
  LANGUAGE: ENGLISH

  A randomized cooperative study of therapy for Staphylococcus aureus bacteremia was conducted in which nafcillin was given for four or six weeks to patients with clinical endocarditis and for two or four weeks to those without evidence of endocarditis. Eighty-four patients were enrolled, and 32 completed treatment, all of whom had bacteriologic cures. Three patients, treated for two weeks, had complications that were undetectable by assay of serum teichoic acid antibody. Data were insufficient to allow conclusions regarding the optimal duration of therapy for patients with or without endocarditis. However, the results suggest that neither clinical nor immunologic methods can reliably detect complications in patients treated for two weeks only. In addition, patients infected with tolerant organisms remained febrile longer than those infected with nontolerant strains but did not require additional antibiotics for cure. Peak serum bactericidal activity at a dilution of 1:8 or greater was present in all patients. Serum bactericidal activity of 1:8 prior to an antibiotic dose was not necessary for cure.

MANUFACTURER NAMES: bristol
DRUG DESCRIPTORS:
*bactericide; *nafcillin
MEDICAL DESCRIPTORS:
*adverse drug reaction; *bacteremia; *drug blood level; *drug efficacy; *drug indication; *endocarditis; *drug therapy; *staphylococcus aureus serum; heart; priority journal; therapy; intravenous drug administration; clinical article; in vitro study; methodology; human; blood and hemopoietic system
MEDICAL TERMS (UNCONTROLLED): **teichoic acid antibody**
CAS REGISTRY NO.: 147-52-4, 985-16-0 (nafcillin)
SECTION HEADINGS:
  004 Microbiology: Bacteriology, Mycology, Parasitology and Virology
  026 Immunology, Serology and Transplantation
  006 Internal Medicine
  037 Drug Literature Index
?
       31oct06 10:25:14 User228206 Session D2654.3
            $0.04   0.012 DialUnits File155
     $0.04 Estimated cost File155
            $0.07   0.012 DialUnits File5
     $0.07 Estimated cost File5

magainin 1--pharmacokinetics--pk; cecropin--pharmacokinetics--pk; lactoferrin--pharmacokinetics--pk; **teichoic acid** --endogenous compound--ec ; lipoteichoic acid--endogenous compound--ec; lipopolysaccharide --endogenous compound--ec
MEDICAL DESCRIPTORS:
*binding site; *drug protein binding; *antimicrobial activity staphylococcus **aureus** ; escherichia coli; article
CAS REGISTRY NO.: 108433-99-4 (magainin 1); 55599-62-7 (lactoferrin); **9041-38-7** (**teichoic acid**); 56411-57-5 (lipoteichoic acid)
SECTION HEADINGS:
004 Microbiology: Bacteriology, Mycology, Parasitology and Virology
029 Clinical and Experimental Biochemistry
030 Clinical and Experimental Pharmacology
037 Drug Literature Index

14/9/4 (Item 4 from file: 73)
DIALOG(R)File 73:EMBASE

07531011 EMBASE No: 1999008730
Assessment of teichoic acid antibodies **in the serious infections with Staphylococcus** aureus
Themeli-Digalaki K.; Economou M.; Kairis D.; Ziva C.; Spaliara L.; Koutsia- Carouzou C.
Acta Microbiologica Hellenica (ACTA MICROBIOL. HELL.) (Greece) 1998, 43/2 (163-166)
CODEN: AMBHA ISSN: 0438-9573
DOCUMENT TYPE: Journal; Article
LANGUAGE: GREEK SUMMARY LANGUAGE: ENGLISH; GREEK
NUMBER OF REFERENCES: 10

We have evaluated the clinical usefulness of the determinations of teichoic acid **antibody** (TAA) in 108 patients with colonization or infection with Staphylococcus **aureus** and the healthy donors as control. The technique of gel diffusion was used. Of total 109 specimens, TAA were detected in 39 (36,1%). Analytically, in patients with septicaemia 62,5%, colonization 10,5%, pus or trauma with isolation of S. **aureus** (36,1%) and serious infections (osteomyelitis, septic arthritis and revision of total arthroplasties 76%). Negative results had patients with coagulase negative Staphylococcus and healthy donors. Good correlation between a positive culture for Staphylococcus **aureus** and TAA was seen in 24 patients with serious infections. The results of this study suggest that TAA titres are useful in diagnosis of staphylococcal infections.

DRUG DESCRIPTORS:
* **teichoic acid** ; *bacterium **antibody** --endogenous compound--ec
MEDICAL DESCRIPTORS:
* **antibody** detection; *staphylococcus infection--diagnosis--di; * staphylococcus **aureus**
antibody titer; **antibody** blood level; correlation function; serodiagnosis; bacterium culture; human; major clinical study; article
CAS REGISTRY NO.: **9041-38-7** (**teichoic acid**)
SECTION HEADINGS:
004 Microbiology: Bacteriology, Mycology, Parasitology and Virology
006 Internal Medicine
026 Immunology, Serology and Transplantation

14/9/5 (Item 5 from file: 73)

Journal of infectious diseases (UNITED STATES) Jun 1983, 147 (6) p1101, ISSN 0022-1899--Print Journal Code: 0413675
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed
Subfile: AIM; INDEX MEDICUS
Descriptors: ***Immunoglobulin** G--analysis--AN; * **Immunoglobulin** M --analysis--AN; * **Staphylococcal** Infections--immunology--IM; *Teichoic Acids--immunology--IM; **Antibody** Formation; Humans
CAS Registry No.: 0 (Immunoglobulin G); 0 (Immunoglobulin M); 0 (Teichoic Acids)
Record Date Created: 19830729
Record Date Completed: 19830729

7/9/52 (Item 52 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

05816196 PMID: 6807836
Polyclonal **response of human lymphocytes to bacterial cell walls, peptidoglycans and** teichoic **acids.**
Rasanen L; Mustikkamaki U P; Arvilommi H
Immunology (ENGLAND) Jul 1982, 46 (3) p481-6, ISSN 0019-2805--Print Journal Code: 0374672
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed
Subfile: INDEX MEDICUS
It has been found earlier that many bacteria are **polyclonal** activators of human lymphocytes. This phenomenon was further analysed by preparing cell walls, peptidoglycans and teichoic acids from **Staphylococcus aureus** Wood 46 and Bacillus subtilis and studying their capacity to stimulate human adult and newborn lymphocytes to proliferate and to produce leucocyte inhibitory factor (LIF). All these bacterial surface components acted as **polyclonal** activators. In our opinion these findings further strengthen the view that in infections there are a variety of bacterial products capable of inducing a **polyclonal** response of the host.
Descriptors: *Cell Wall--immunology--IM; *Lymphocyte Activation; *Peptidoglycan--immunology--IM; *Teichoic Acids--immunology--IM; Adult; Bacillus subtilis--immunology--IM; Fetal Blood--immunology--IM; Humans; Infant, Newborn; Leukocyte Migration-Inhibitory Factors--biosynthesis--BI; **Staphylococcus aureus** --immunology--IM
CAS Registry No.: 0 (Leukocyte Migration-Inhibitory Factors); 0 (Peptidoglycan); 0 (Teichoic Acids)
Record Date Created: 19820910
Record Date Completed: 19820910

7/9/14 (Item 14 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08130998 PMID: 2473994
Antibodies **to** staphylococcal **peptidoglycan and its peptide epitopes,** teichoic **acid, and lipoteichoic acid in sera from blood donors and**

patients with staphylococcal **infections.**
Wergeland H I; Haaheim L R; Natas O B; Wesenberg F; Oeding P
Department of Microbiology and Immunology, Gade Institute, Bergen, Norway.
Journal of clinical microbiology (UNITED STATES) Jun 1989, 27 (6) p1286-91, ISSN 0095-1137--Print Journal Code: 7505564
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed
Subfile: INDEX MEDICUS

Antibodies to the **staphylococcal** antigens peptidoglycan, beta-ribitol teichoic acid, and lipoteichoic acid, as well as to the peptidoglycan epitopes L-Lys-D-Ala-D-Ala, L-Lys-D-Ala, and pentaglycine, were found over a wide range of concentrations in sera from both blood donors and patients with verified or suspected **staphylococcal** infections. The patient group was heterogeneous with regard to both age and type of **staphylococcal** infections, being representative for sera sent to our laboratory. In single-antigen assays **antibodies** to pentaglycine had the highest predictive positive value (67%), although only 32% of the patients had elevated levels of such **antibodies** . Combinations of test antigens could yield positive predictive values as high as 100%, but then the fraction of positive sera was low. Indeed, the fraction of patient sera which was positive in multiple-antigen tests never exceeded 61%. The clinical usefulness of these seroassays for identifying **Staphylococcus aureus** as a causative agent was limited, owing to the considerable overlap in the range of **antibody** concentrations between patient and blood donor sera.

Descriptors: ***Antibodies** , Bacterial--analysis--AN; *Antigens, Bacterial --immunology--IM; * **Staphylococcal** Infections--immunology--IM; * **Staphylococcus aureus** --immunology--IM; Adolescent; Adult; Aged; Blood Donors; Child; Enzyme-Linked Immunosorbent Assay; Epitopes--immunology--IM; Humans; **Immunoglobulins** --analysis--AN; Lipopolysaccharides--immunology --IM; Middle Aged; Peptidoglycan--immunology--IM; Predictive Value of Tests ; **Staphylococcal** Infections--diagnosis--DI; **Staphylococcal** Infections --microbiology--MI; Teichoic Acids--immunology--IM

CAS Registry No.: 0 (Antibodies, Bacterial); 0 (Antigens, Bacterial); 0 (Epitopes); 0 (Immunoglobulins); 0 (Lipopolysaccharides); 0 (Peptidoglycan); 0 (Teichoic Acids); 56411-57-5 (lipoteichoic acid)
Record Date Created: 19890901
Record Date Completed: 19890901

7/9/2 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

13069406 PMID: 11199222
Immunoreactivity of 80-kDa peptidoglycan and teichoic **acid-like substance of slime producing S. epidermidis and specificity of their** antibodies **studied by an enzyme immunoassay.**
Kolonitsiou F; Syrokou A; Karamanos N K; Anastassiou E D; Dimitracopoulos G
Department of Microbiology, School of Medicine, University of Patras, Greece.
Journal of pharmaceutical and biomedical analysis (England) Jan 2001, 24 (3) p429-36, ISSN 0731-7085--Print Journal Code: 8309336
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH

7/3/204 (Item 5 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00467529 **Image available**
OPSONIC AND PROTECTIVE MONOCLONAL **AND CHIMERIC** ANTIBODIES **SPECIFIC FOR** LIPOTEICHOIC **ACID OF GRAM POSITIVE BACTERIA**
ANTICORPS OPSONIQUES, MONOCLONAUX PROTECTEURS, ET CHIMERES SPECIFIQUES A L'ACIDE LIPOTEICHOIQUE DES BACTERIES GRAM POSITIF
Patent Applicant/Assignee:
HENRY M JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY MEDICINE,
Inventor(s):
FISCHER Gerald W,
SCHUMAN Richard F,
WONG Hing,
STINSON Jeffrey L,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9857994 A2 19981223
Application: WO 98US12402 19980616 (PCT/WO US9812402)
Priority Application: US 9749871 19970616
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM
GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX
NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW GH GM
KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI
FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 25186

7/3/205 (Item 6 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00401599
TEICHOIC **ACID ENZYMES AND ASSAYS**
ENZYMES D'ACIDE TEICHOIQUE ET DOSAGES
Patent Applicant/Assignee:
PHARMACIA & UPJOHN COMPANY,
SHINABARGER Dean L,
SWANEY Steven M,
EGAN Sara E,
Inventor(s):
SHINABARGER Dean L,
SWANEY Steven M,
EGAN Sara E,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9742343 A2 19971113
Application: WO 97US7123 19970505 (PCT/WO US9707123)
Priority Application: US 9616868 19960507
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU
IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL
PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN YU GH KE LS MW SD SZ
UG AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC
NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
Publication Language: English

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Set     Items   Description
S1         21   'TEICHOIC ACID ANTIBODIES' OR 'TEICHOIC ACID ANTIBODY'
S2          1   'TEICHOIC ACID PEPTIDOGLYCAN ANTI-WHOLE CELL AN'
S3        647   RN='9041-38-7'
S4      51679   R1:R2
S5      51679   S3 OR S4
S6       3826   S5 AND (IMMUNOGLOB? OR ANTIBOD? OR IGG OR IGM OR SIGA OR IG
                OR ANTISER? OR POLYCLONAL? OR MAB OR MOAB OR MONOCLONAL? OR -
               SCFV?)
S7       1388   S6/2002:2006
S8       2438   S6 NOT S7
S9         22   S1 OR S2
S10   1965816   9/2002:2006
S11        22   S9 NOT S10
S12        12   S8 AND (TAPHYLOC? OR CROSSREACT?)
S13        14   S8 AND (RIBITOL? OR RIBOTOL?)
S14        80   S8 AND AUREUS?
S15         0   S9/2002:2006
? t s9/9/5

 14/9/2     (Item 2 from file: 73)
DIALOG(R)File  73:EMBASE
(c) 2006 Elsevier B.V. All rts. reserv.

07909622     EMBASE No: 1999382930
  Initial binding sites of antimicrobial peptides in Staphylococcus  aureus
 and Escherichia coli
  Vorland L.H.; Ulvatne H.; Rekdal O.; Svendsen J.S.
  Dr. L.H. Vorland, Department of Medical Microbiology, NO-9038 University
  Hospital, Tromso  Norway
  Scandinavian Journal of Infectious Diseases ( SCAND. J. INFECT. DIS. ) (
  Norway)  1999, 31/5 (467-473)
  CODEN: SJIDB   ISSN: 0036-5548
  DOCUMENT TYPE: Journal; Article
  LANGUAGE: ENGLISH   SUMMARY LANGUAGE: ENGLISH
  NUMBER OF REFERENCES: 37

  We examined the initial binding sites of magainin 1, cecropin P1 and
lactoferricin B in Staphylococcus  aureus  and Escherichia coli. All 3
peptides were active against E. coli, whereas only lactoferricin B exerted
any activity against S.  aureus . Soluble lipoteichoic acid and
lipopolysaccharide both interacted with all 3 peptides, whereas soluble
teichoic acid interacted with lactoferricin B only.  Antibodies  against
teichoic acid diminished the activity of lactoferricin B, while  antibodies
 against lipoteichoic acid had no influence on the activity of
lactoferricin B.  Antibodies  against lipopolysaccharide diminished the
activity of lactoferricin B and magainin 1, but had no effect on the
activity of cecropin P1 against E. coli. We conclude that the initial
binding sites of lactoferricin B in S.  aureus , and of lactoferricin B and
magainin 1 in E. coli, are teichoic acid and lipopolysaccharide,
respectively. Cecropin P1 seems to interact with a different binding site
than those of magainin 1 and lactoferricin B in E. coli.

DRUG DESCRIPTORS:
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03967466 EMBASE No: 1989136462

Antibodies **to staphylococcal peptidoglycan and its peptide epitopes, teichoic acid, and lipoteichoic acid in sera from blood donors and patients with staphylococcal infections**

Wergeland H.I.; Haaheim L.R.; Natas O.B.; Wesenberg F.; Oeding P.
Department of Microbiology and Immunology, The Gade Institute, University of Bergen, Bergen Norway

Journal of Clinical Microbiology (J. CLIN. MICROBIOL.) (United States) 1989, 27/6 (1286-1291)
CODEN: JCMID ISSN: 0095-1137
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

Antibodies to the staphylococcal antigens peptidoglycan, beta-ribitol teichoic acid, and lipoteichoic acid, as well as to the peptidoglycan epitopes L-Lys-D-Ala-D-Ala, L-Lys-D-Ala, and pentaglycine, were found over a wide range of concentrations in sera from both blood donors and patients with verified or suspected staphylococcal infections. The patient group was heterogeneous with regard to both age and type of staphylococcal infections, being representative for sera sent to our laboratory. In single-antigen assays **antibodies** to pentaglycine had the highest predictive positive value (67%), although only 32% of the patients had elevated levels of such **antibodies** . Combinations of test antigens could yield positive predictive values as high as 100%, but then the fraction of positive sera was low. Indeed, the fraction of patient sera which was positive in multiple-antigen tests never exceeded 61%. The clinical usefulness of these seroassays for identifying Staphylococcus **aureus** as a causative agent was limited, owing to the considerable overlap in the range of **antibody** concentrations between patient and blood donor sera.

DRUG DESCRIPTORS:
*bacterium **antibody** ; *lipoteichoic acid; *peptidoglycan; * **teichoic acid** **immunoglobulin** a; **immunoglobulin** g; **immunoglobulin** m
MEDICAL DESCRIPTORS:
*blood donor; *staphylococcus **aureus**
serum; human; human cell; nonhuman; priority journal
CAS REGISTRY NO.: 56411-57-5 (lipoteichoic acid); 9047-10-3 (peptidoglycan) ; **9041-38-7** (**teichoic acid**); 97794-27-9 (**immunoglobulin** g); 9007-85-6 (**immunoglobulin** m)
SECTION HEADINGS:
004 Microbiology: Bacteriology, Mycology, Parasitology and Virology
025 Hematology
026 Immunology, Serology and Transplantation

14/9/29 (Item 29 from file: 73)
DIALOG(R)File 73:EMBASE

03517908 EMBASE No: 1987034844

Antibody **response to teichoic acid and peptidoglycan in Staphylococcus aureus osteomyelitis**

Jacob E.; Durham L.C.; Falk M.C.; et al.
Naval Medical Research Institute, Bethesda, MD 20814 United States

Journal of Clinical Microbiology (J. CLIN. MICROBIOL.) (United States) 1987, 25/1 (122-127)
CODEN: JCMID
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH

DOCUMENT-IDENTIFIER: US 6939543 B2
**** See image for Certificate of Correction ****
TITLE: Opsonic and protective monoclonal and chimeric antibodies specific for lipoteichoic acid of gram positive bacteria

Other Reference Publication (54):
West, Timothy E. et al., "Detection of Anti-Teichoic Acid Immunogloublin G Antibodies in Experimental Staphylococcus epidermidis Endocarditis," Infection and Immunity, vol. 42, No. 3, 1983, pp. 1020-1026.

Previous Doc Next Doc Go to Doc#

DOCUMENT-IDENTIFIER: US 6703025 B1
TITLE: Multicomponent vaccines

Detailed Description Text (95):
Teichoic acids, lipoteichoic acid for example, which are polymers of glycerol or ribotol phosphate, are linked to the peptidolglycan and can be antigenic. Antiteichoic antibodies detectable by gel diffusion may be found in patients with active endocarditis due to S. aureus.

Previous Doc

DOCUMENT-IDENTIFIER: US 6632432 B1
**** See image for Certificate of Correction ****
TITLE: Directed human immune globulin for the prevention and treatment of staphylococcal infections

Other Reference Publication (26):
West et al., "Detection of Anti-teichoic Acid Immunoglobulin G Antibodies in Experimental Staphylococcus epidermidis Endocarditis," Infect. and Immun., 42:1020-1026 (1983).

Previous Doc Next Doc Go to Doc

DOCUMENT-IDENTIFIER: US 5961975 A
TITLE: Type I surface antigen associated with staphylococcus epidermidis

Detailed Description Text (25):
Protein and nucleic acid analysis of the purified Type I and Type II antigens revealed that neither antigen contains protein or nucleic acids. Trypsin hydrolysis revealed that Type I and Type II antigens are trypsin resistant. When cells were heat treated at 100.degree. C. for thirty minutes, the surface antigens were selectively removed, i.e., teichoic acid was not removed. Before heat treatment, the cells did not react with antiteichoic acid antiserum, whereas after heat treatment, the cells did react.

Previous Doc Next Doc Go to Doc#

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L19: Entry 2 of 11 File: PGPB Mar 18, 2004

DOCUMENT-IDENTIFIER: US 20040052779 A1
TITLE: Opsonic monoclonal and chimeric antibodies specific for lipoteichoic acid of Gram positive bacteria

Summary of Invention Paragraph:
[0010] Further exacerbating the problem, the role of the common surface antigens on staphylococci has been unclear. For example, while lipoteichoic acid and teichoic acid make up the majority of the cell wall of S. aureus, there was no prior appreciation that antibodies to lipoteichoic acid and teichoic acid could be protective. Indeed, anti-teichoic acid antibodies have been often used as controls. For example, Fattom et al. examined the opsonic activity of antibodies induced against a type-specific capsular polysaccharide of S. epidermidis, using as controls antibodies induced against teichoic acids and against S. hominus. While type-specific antibodies were highly opsonic, anti-teichoic acid antibodies were not functionally different from the anti-S. hominus antibodies (6).

Detail Description Paragraph:
[0242] 42. West, Timothy E.; Cantey, J. R.; Apicella, Michael A.; and Burdash, N. M. 1983. Detection of anti-teichoic acid immunoglobulin G antibodies in experimental Staphylococcus epidermidis endocarditis, Infection and Immunity 42: 1020-1026.

Previous Doc Next Doc Go to Doc#

0005576889 **IMAGE Available
Derwent Accession: 2003-646000
Opsonic monoclonal **and chimeric** antibodies **specific for** lipoteichoic **acid of Gram positive bacteria**
Inventor: Stinson, Jeffrey, INV
Schuman, Richard, INV
Mond, James, INV
Lees, Andrew, INV
Fischer, Gerald, INV
Correspondence Address: Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P., 1300 I Street, N.W., Washington, DC, 20005-3315, US

	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 20040052779	A1	20040318	US 2002323926	20021220
Provisional				US 60-343503	20011221

Fulltext Word Count: 24045
Opsonic monoclonal **and chimeric** antibodies **specific for** lipoteichoic **acid of Gram positive bacteria**

Abstract:
The present invention encompasses **monoclonal antibodies** that bind to lipoteichoic acid (LTA) of Gram positive bacteria. The **antibodies** also bind to whole bacteria and enhance phagocytosis and killing of the bacteria in vitro. The invention also provides **antibodies** having human sequences (chimeric, humanized and human **antibodies**). The invention also sets forth the variable regions of three **antibodies** within the invention and presents the striking homology between them...

Summary of the Invention:
...0003] This invention in the fields of immunology and infectious diseases relates to **antibodies** that are specific for Gram positive bacteria, particularly to bacteria that bear lipoteichoic acids on their surfaces. The invention includes **monoclonal** and chimeric **antibodies** , as well as fragments, regions and derivatives thereof. This invention further relates to sequences of the variable region that enhance the **antibody** 's opsonic activity. The **antibodies** of the invention may be used for diagnostic, prophylactic and therapeutic applications...

...increasing development of bacteria that are resistant to antibiotics, such as members of the genera **Staphylococcus** .

7/3/171 (Item 4 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res.

0045913 DBR Accession No.: 86-03761
Antibodies **to** lipoteichoic **acid from** Staphylococcus aureus : **specificity of murine** monoclonal **and human** antibodies **- hybridoma construction and** monoclonal antibody **production**
AUTHOR: Aasjord P; Haaheim L R
CORPORATE SOURCE: Avdeling for microbiologi og immunologi, Gades institutt, Universitetet i Bergen, MFH-bygget, N-5016 Haukeland sykehus, Norway.
JOURNAL: Acta Pathol.Microbiol.Immunol.Scand.C (93, 6, 245-50) 1985
CODEN: 0230T
LANGUAGE: English

Requested

7/3/172 (Item 5 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res.

0021050 DBR Accession No.: 84-04325
Monoclonal antibodies **to immunodeterminants of** lipoteichoic **acids - hybridoma generation and** monoclonal antibody **production against cell wall determinant of Gram-negative bacteria**
AUTHOR: Jackson D E; Wong W; Largen M T; +Shockman G D
CORPORATE SOURCE: Department of Microbiology and Immunology, Temple University School of Medicine, Philadelphia, Pennsylvania 19140, USA.
JOURNAL: Infect.Immun. (43, 3, 800-03) 1984
CODEN: INFIBR
LANGUAGE: English

Polyglycerol phosphate

7/3/173 (Item 1 from file: 654)
DIALOG(R)File 654:US Pat.Full.

6387125
Derwent Accession: 1999-095329
UTILITY
Vaccines, methods, and antibodies **specific for** lipoteichoic **acid of gram positive bacteria**
Inventor: Fischer, Gerald W., Bethesda, MD, US
Schuman, Richard F., Gaithersburg, MD, US
Wong, Hing, Weston, FL, US
Stinson, Jeffrey R., Davie, FL, US
Assignee: The Henry M. Jackson Foundation for the Advancement of Military Medicine, (02)
Sunol Molecular Corporation, (02)
Correspondence Address: WINSTON & STRAWN LLP, 1700 K STREET, N.W., WASHINGTON, DC, 20006, US

	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 20060002939	A1	20060105	US 2005193440	20050801
Division	US 6939543			US 2001893615	20010629
Division	US 6610293			US 9897055	19980615
Provisional				US 60-49871	19970616

Publication Number	Application Number	Doc Kind	Pages	Country
03059260	0241033	A2	99	WO

Publication Date	Application Date	Emperor Code
Jul 24, 2003	Dec 23,2002	

OK | Print Detail

Priority Number	Inventor
34350301	STINSON JEFFREY R

Int'l Classification	Patent Applicant
A61K/	BIOSYNEXUS INC

Title Of Invention

OPSONIC MONOCLONAL AND CHIMERIC ANTIBODIES SPECIFIC FOR LIPOTEICHOIC ACID OF GRAM POSITIVE
ANTICORPS MONOCLONAUX ET CHIMERIQUES OPSONIQUES SPECIFIQUES DE L'ACIDE LIPOTEICHOIQUE DI

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Publication Number	Application Number	Doc Kind	Pages	Country
03059260	0241033	A3	4	WO

Publication Date	Application Date	Emperor Code
Jan 1, 9999	Dec 23,2002	

OK | Print Detail

Priority Number	Inventor
34350301	STINSON JEFFREY R

Int'l Classification	Patent Applicant
C12P21/08	BIOSYNEXUS INC

Title Of Invention

OPSONIC MONOCLONAL AND CHIMERIC ANTIBODIES SPECIFIC FOR LIPOTEICHOIC ACID OF GRAM POSITIVE
ANTICORPS MONOCLONAUX ET CHIMERIQUES OPSONIQUES SPECIFIQUES DE L'ACIDE LIPOTEICHOIQUE DI

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Publication Number	Application Number	Doc Kind	Pages	Country
0245742	0128217	A2	26	WO

Publication Date	Application Date	Emperor Code
Jun 13, 2002	Sep 10,2001	

OK | Print Detail

Priority Number: 23195900

Inventor: DRABICK JOSEPH J

Int'l Classification: A61K39/02

Patent Applicant: U S ARMY MEDICAL RES AND MATER

Title Of Invention

LIPOTEICHOIC ACID IMMUNOGENIC COMPOSIIONS AND METHODS OF MAKING AND USING THEREOF
COMPOSITIONS IMMUNOGENIQUES D'ACIDE LIPOTEICHOIQUE ET PROCEDES DE PREPARATION ET D'UTILI

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Monday, Oct 30 2006, 6:36:00 PM